



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Freeman et al. ) Group Art Unit:  
Serial No: 10/649,209 )  
Filed: 08/27/2003 ) Examiner:  
For: BEAMFORMED ULTRASONIC ) Attorney Docket No.: 1693-90485  
IMAGER WITH DELTA-SIGMA )  
FEEDBACK CONTROL )

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In accordance with 37 C.F.R. §§ 1.51, 1.56, 1.97 and 1.98 applicant submits herewith the attached form PTO 1449 for consideration by the Examiner in connection with the examination of the present application. Under 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined by 37 C.F.R. §1.56(a) exists.

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Respectfully submitted,

  
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ATTY DOCKET NO.  
1693-90485

SERIAL NO.  
10/649-209

Freeman et al.

FILING  
08/27/2003

GROUP

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,946,320	03/23/76	Overbury			
SEP 15 2003 USPTO PATENT & TRADEMARK OFFICE	4,772,871	08/20/88	Suzuki et al.			
	5,030,954	07/09/91	Ribner			
	5,144,308	09/01/92	Norsworthy			
	5,203,335	04/20/93	Noujaim et al.			
	5,241,310	08/31/93	Tiemann			
	5,446,917	08/29/95	Krisciunas et al.			
	5,461,389	10/24/95	Dean			
	5,477,859	152/26/95	Engeter			
	5,521,499	05/28/96	Goldenberg			
	5,668,777	09/16/97	Schneider			

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	62-224345	10/02/87	Japan				

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

		Norman, O., A Band-Pass Delta-Sigma Modulator for Ultrasound Imaging at 160 MHz Clock Rate, 31 (12) IEEE Journal of Solid-State Circuits 2036-41 (December 1996)
		Baseri, R., et al., Testing Adaptive Jamming Cancellation Algorithms using a Digital Beamforming Array, Proceedings fo the 1996 IEEE National Radar Conference (May 13-15, 1997)

EXAMINER	DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.